

CLAIMS:

1. An organic EL display apparatus including in each display pixel an organic EL element and a drive transistor that supplies the organic EL element with a drive current that depends on brightness data and having the display pixels arranged in a matrix form, the organic EL display apparatus comprising:

a correction gain storage unit for storing display pixel positions and a correction gain for correcting the slope of the brightness-data-based drive current of the drive transistors in the display pixels; and

a correction unit for correcting pixel-by-pixel brightness data depending on the pixel position using the correction gain stored in the correction gain storage unit into brightness data for the pixel to generate corrected brightness data, wherein each of the display pixels is displayed by driving its drive transistor in response to the data generated by the correction gain storage unit and the correction unit and supplying the corresponding organic EL element with the drive current.

2. The organic EL display apparatus according to claim 1, wherein the correction unit multiplies brightness data by a correction gain.

3. The organic EL display apparatus according to claim 1, further includes:

a correction offset storage unit for storing a display pixel position and a correction offset for correcting an offset for brightness data of the drive transistor in the display pixel for an area having a given plurality of display pixels, wherein the correction unit corrects pixel-by-pixel brightness data depending on the pixel position using the correction gain stored in the correction gain storage unit and the correction offset stored in the correction offset storage unit into brightness data for the pixel to generate corrected brightness data.

4. The organic EL display apparatus according to claim 3, wherein the correction unit adds the correction offset to or subtracts the offset from the brightness data.

5. The organic EL display apparatus according to claim 1, wherein the correction gain storage unit stores a correction value for each of horizontal or vertical lines.

6. The organic EL display apparatus according to claim 1, further
5 including:

overall emission control means for allowing all display pixels in a display area, in which the display pixels are arranged in a matrix form, to emit light based on two or more items of brightness data different from one another;

selective emission control means for permitting organic EL elements of a
10 plurality of display pixels within the given area in the display area to selectively emit light based on two or more pieces of brightness data different from one another;

current detection means for detecting individual drive currents when all and selected pixels emit light; and

slope characteristic calculation means for calculating, in relation to a slope
15 of drive current with respect to brightness data in a display pixel selected based on the detected drive current, the relationship of the slope of the drive current with respect to the brightness data for all display pixels, wherein a correction gain corresponding to a slope characteristic calculated by the slope characteristic calculation means is stored in the correction gain storage unit.

20 7. The organic EL display apparatus according to claim 6, further including:

offset characteristic calculation means for calculating, in relation to a drive current offset with respect to brightness data in a display pixel selected based on the detected drive current, the relationship of the drive current offset with respect to the
25 brightness data for all display pixels, wherein a correction offset corresponding to an offset characteristic calculated by the offset characteristic calculation means is stored in the correction offset storage unit.